

WHAT IS CLAIMED IS:

1. An object-naming network infrastructure, comprising:
a central object name server coupled to a computer network and
constituting a first hierarchical level; and
peripheral object name servers coupled to said computer
network and constituting a second hierarchical level, said central
object name server responding to an object name query received from
a querying system by directing said querying system to query
instead one of said peripheral object name servers in said second
hierarchical level, said one of said peripheral object name servers
alternatively responding to said query with an object name or
directing said querying system to query instead further peripheral
object name servers constituting a third hierarchical level.

2. The infrastructure as recited in Claim 1 wherein said
object name query comprises a unique code associated with said
object name.

3. The infrastructure as recited in Claim 1 wherein said
object name query comprises a 96-bit number derived from an
identification tag.

4. The infrastructure as recited in Claim 1 wherein said
object name query comprises information derived from a surface
acoustic wave identification tag.

5. The infrastructure as recited in Claim 1 wherein said
querying system contains an object name cache for containing said
object name, said querying system directing said object name query
to said cache before directing said object name query to said
central object name server.

6. The infrastructure as recited in Claim 1 wherein at least
some of said peripheral object name servers of said second
hierarchical level are associated with corresponding object
manufacturers.

7. The infrastructure as recited in Claim 1 wherein address
spaces of said peripheral object name servers of said second
hierarchical level are centrally assigned.

8. The infrastructure as recited in Claim 1 wherein address
spaces of said further peripheral object name servers of said third
hierarchical level are assigned by corresponding object
manufacturers.

11. A method of responding to a query for an object name,
comprising:

initially directing said query to a central object name server
coupled to a computer network and constituting a first hierarchical
level;

subsequently directing said query instead to one of peripheral
object name servers coupled to said computer network and
constituting a second hierarchical level; and

alternatively responding to said query with an object name or
directing said query instead to further peripheral object name
servers constituting a third hierarchical level.

12. The method as recited in Claim 11 wherein said object
name query comprises a unique code associated with said object
name.

13. The method as recited in Claim 11 further comprising a
deriving a 96-bit number from an identification tag to form said
object name query.

14. The method as recited in Claim 11 further comprising
deriving information from a surface acoustic wave identification
tag to form said object name query.

15. The method as recited in Claim 11 wherein said querying
2 system contains an object name cache for containing said object
3 name, said method further comprising first directing said object
4 name query to said cache before said initially directing.

16. The method as recited in Claim 11 wherein at least some
2 of said peripheral object name servers of said second hierarchical
3 level are associated with corresponding object manufacturers.

17. The method as recited in Claim 11 further comprising
centrally assigning address spaces of said peripheral object name
servers of said second hierarchical level.

18. The method as recited in Claim 11 further comprising
assigning, by corresponding object manufacturers, address spaces of
said further peripheral object name servers of said third
hierarchical level.

19. The method as recited in Claim 11 wherein said querying
2 system is associated with a tag reader.

20. The method as recited in Claim 11 wherein said computer
2 network is the Internet.

21. An object-naming network infrastructure, comprising:

a central object name server coupled to the Internet and
constituting a first hierarchical level; and

peripheral object name servers coupled to the Internet,
associated with corresponding object manufacturers and constituting
a second hierarchical level, said central object name server
responding to an object name query received from a querying system
by directing said querying system to query instead one of said
peripheral object name servers in said second hierarchical level,
said one of said peripheral object name servers alternatively
responding to said query with an object name or directing said
querying system to query instead further peripheral object name
servers constituting a third hierarchical level.

22. The infrastructure as recited in Claim 21 wherein said
object name query comprises a unique code associated with said
object name.

23. The infrastructure as recited in Claim 21 wherein said
object name query comprises a 96-bit number derived from an
identification tag.

24. The infrastructure as recited in Claim 21 wherein said
2 object name query comprises information derived from a surface
3 acoustic wave identification tag.

25. The infrastructure as recited in Claim 21 wherein said
2 querying system contains an object name cache for containing said
3 object name, said querying system directing said object name query
4 to said cache before directing said object name query to said
5 central object name server.

26. The infrastructure as recited in Claim 21 wherein address
spaces of said peripheral object name servers of said second
hierarchical level are centrally assigned.

27. The infrastructure as recited in Claim 21 wherein address
spaces of said further peripheral object name servers of said third
hierarchical level are assigned by said corresponding object
4 manufacturers.

28. The infrastructure as recited in Claim 21 wherein said
2 querying system is associated with a tag reader.